WHAT IS CLAIMED IS:

1.   A patient physiologic monitoring assembly comprising:

a plurality of sensors generating a real-time physiologic data stream, said real-time physiologic data stream including a plurality of physiologic variables; and

a controller receiving said real-time physiologic data stream, said controller including a logic adapted to

cross reference said plurality of physiologic variables with a logic rule set, said logic rule set including a plurality of logic rules; and

generate a plurality of diagnostic interpretations of said plurality of physiologic variables utilizing said logic rule set.

2.   A patient physiologic monitoring assembly as described in claim 1, wherein said logic is further adapted to display said first plurality of diagnostic interpretations on a display element.

3.   A patient physiologic monitoring assembly as described in claim 1, wherein said logic is further adapted to select said first logic rule set from a rules database, said rules database including a plurality of logic rule sets.

4.   A patient physiologic monitoring assembly as described in claim 1, wherein the logic rule set is a first logic rule set, and the plurality of diagnostic interpretations is a first plurality of diagnostic interpretations; and

wherein said logic is further adapted to select a second logic rule set from a rules database, said rules database including a plurality of logic rule sets; and generate a second plurality of diagnostic

interpretations of said plurality of physiologic variables utilizing said second logic rule set.

5. A patient physiologic monitoring assembly as described in claim 1, wherein said logic is further adapted to modify one of said plurality of logic rules within said first logic rule set.

6. A patient physiologic monitoring assembly as described in claim 5, wherein said modification comprises editing one of said plurality of logic rules.

7. A patient physiologic monitoring assembly as described in claim 5, wherein said modification comprises deleting one of said plurality of logic rules.

8. A patient physiologic monitoring assembly as described in claim 5, wherein said modification comprises adding a new logic rule to said first logic rule set.

9. A patient physiologic monitoring assembly as described in claim 1, wherein said logic is further adapted to add a new logic rule set to a rules database.

10. A patient physiologic monitoring assembly as described in claim 1, further comprising a plurality of networked medical facilities in communication with said controller such that said first logic rule set may be received from any of said plurality of networked medical facilities.

11.   A method for monitoring a subject comprising:

storing a plurality of rule-based algorithms that can generate different responses;

determining which rule based algorithm to apply;

5   acquiring data relating to the subject from a sensor;

applying at least one of the plurality of the rule-based algorithms based on the data; and

generating a response based on the application of at least one of the plurality of rule-based algorithms.

10   12.   The method of claim 11, wherein determining which algorithm to apply comprises displaying a list of choices to a user and receiving a user input indicative of a selection made by the user.

13.   The method of claim 11, wherein determining which rule-based algorithm to apply comprises receiving data relating to a

15   characteristic of a subject, and selecting a rule-based algorithm to apply based on the received data relating to the characteristic of the subject.

14.   The method of claim 11, wherein acquiring data relating to the subject from a monitor comprises acquiring vital signs data relating to a patient.

20   15.   The method of claim 11, further comprising increasing the number of rule-based algorithms that are stored.

16.   The method of claim 11, further comprising transferring a rule-based algorithm that is stored.

17.   The method of claim 11, wherein generating a response

25   based on the application of at least one of the plurality of rule-based algorithms comprises generating an alarm.

18.   The method of claim 11, wherein the rule-based algorithms supply information related to a diagnostic interpretation.

19.   The method of claim 11, wherein determining which rule-based algorithm to apply comprises determining to apply a plurality of rule-based algorithms.

20.   The method of claim 11, wherein generating a response based on the application of at least one of the plurality of rule-based algorithms comprises generating a response based on all of the rule-based algorithms applied.

21.   A method for generating a response relating to a subject comprising:

acquiring data from at least one sensor coupled to the subject;

5   applying a plurality of rule-based algorithms; and

generating a plurality of interpretations of the data based on the application of the plurality of algorithms.

22.   The method of claim 21, further comprising generating an alarm based on the plurality of responses.

10   23.   The method of claim 21, wherein the rule-based algorithms supply information related to a diagnostic interpretation.

24.   The method of claim 21, wherein inputting data relating to the subject comprises acquiring physiological data relating to the subject of interest from at least one sensor coupled to the subject.

15   25.   The method of claim 21, wherein inputting data relating to the subject comprises acquiring data from a database record relating to the subject.

26.   The method of claim 21, further comprising:

storing a plurality of rule-based algorithms that can generate

20   different responses; and

determining which of the plurality of rule-based algorithms to apply.

27.   The method of claim 21, wherein acquiring data from at least one sensor comprises acquiring data from a plurality of sensors, the

25   plurality of sensors configured to acquire data relating to a plurality of physiologic variables.

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28.   The method of claim 21, wherein the plurality of responses are used to generate a certainty score.

29.   A method for monitoring a subject, comprising:

acquiring data from more than one sensor coupled to the subject, the sensors inputting data relating to more than one characteristic of the subject;

applying the data to a plurality of rule-based algorithms; and

generating a plurality of responses based on the application of the data to the rule-based algorithms.

30.   The method of claim 29, wherein generating a response based on the application of at least one of the rule-based algorithms includes generating a value for a characteristic being monitored based on the acquired data from more than one sensor.

31.   The method of claim 29, wherein the rule-based algorithms supply information related to a diagnostic interpretation.

32.   The method of claim 29, further comprising:

storing a plurality of rule-based algorithms that can generate different responses; and

determining which rule-based algorithm to apply.

33. A system for using rule-based algorithms, comprising:

a data storage device configured to store rule-based algorithms; and

a network interface configured to transfer the rule-based

5 algorithms across a network, the rule-based algorithm being usable in a system configured to accept rule based algorithms written by unrelated entities.

34. The system of claim 33, further comprising:

a data acquisition device configured to acquire data from a

10 patient; and

a controller that receives the acquired data, the controller including a logic configured to apply the data acquired from the patient to at least one rule-based algorithm transferred from the data storage device.

35. The system of claim 34, comprising a controller having a

15 logic that allows rule-based algorithms to be added and removed from a list of algorithms to be applied to the data.

36. The system of claim 33, wherein the rule-based algorithms supply information related to a diagnostic interpretation.

37. The system of claim 33, further comprising a controller, the

20 controller including a logic configured to identify a rule-based algorithm that has been modified based on the characteristics of a subject and to transfer the rule-based algorithm to be used by a monitor that is monitoring the subject using the network interface.

38. The system of claim 33, further comprising a bill generator

25 configured to generate a bill based on transferring of rule based algorithms.

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39. A method for supplying rule-based algorithms for use in a medical monitor, comprising:

storing a rule-based algorithm; and

transferring a rule-based algorithm across a network, the rule-based algorithm being transferred to a health care facility from a storage location outside of the health care facility's network.

40. The method of claim 39, further comprising generating a bill based on the transferring of the rule-based algorithm.

41. The method of claim 39, further comprising transferring the rule-based algorithms only if a predetermined condition relating to access is met.

42. The method of claim 41, wherein the predetermined condition is payment of a fee.

43. The method of claim 39, wherein the rule-based algorithms supply information related to a diagnostic interpretation.

44. The method of claim 39, further comprising:

acquiring data from a sensor coupled to a patient; and

applying the data to a plurality of rule-based algorithms, at least one of the plurality of rule-based algorithms being transferred across the network.

45. The method of claim 39, wherein transferring the rule-based algorithm across a network comprises transferring the rule-based algorithm from a source outside a health care facility's network to a source related to the health care facility.

46. A monitoring system for monitoring a patient, comprising:

a user interface, the user interface configured to facilitate transferring of rule-based algorithms; and

a logic configured to apply data acquired from a sensor coupled to the patient to a rule-based algorithm that is transferred using the user interface.

47. The monitoring system of claim 46, wherein the logic is adapted to apply rules written by unrelated groups.

48. The monitoring system of claim 46, wherein the logic is configured such that it can apply more than one set of rule-based algorithms at a time.

49. The monitoring system of claim 46, wherein the rule-based algorithms supply information related to a diagnostic interpretation.

50. The monitoring system of claim 46, wherein the user interface facilitates transferring of rules-based algorithms across a network.

51. The monitoring system of claim 50, wherein the user interface facilitates transferring rules-based algorithms from a system outside of a health care facility's network.

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52.　A method for monitoring a patient, comprising:

acquiring data from a sensor that is monitoring a patient; and

displaying information related to a diagnostic interpretation

made when the data is applied to a rule-based algorithm.

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53.　The method of claim 52, wherein the diagnostic interpretation is made based on an abnormal trend identified by applying the data to the rule-based algorithm.

54.　The method of claim 52, wherein the diagnostic interpretation is made based on data from a plurality of sensors.

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55.　The method of claim 52, wherein the rule-based algorithms supply information related to a diagnostic interpretation.

56.　The method of claim 52, further comprising increasing or decreasing the number of rule-based algorithms to apply.

57.　The method of claim 52, further comprising transferring in a

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rule-based algorithm to apply.

58.　The method of claim 52, wherein displaying information related to a diagnostic interpretation comprises displaying a plurality of suggested reasons, the reasons based on the application of the data to at least two rule based algorithms.